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THE GENUS *SCLERIA* (CYPERACEAE) IN COLOMBIA. AN UPDATED CHECKLIST

El género *Scleria* (Cyperaceae) en Colombia. Una lista anotada

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ABSTRACT
An updated, annotated checklist of the genus *Scleria* (Cyperaceae) for Colombia is presented. An identification key to the 32 species recognized in this treatment is included. Following species are new records for Colombia: *Scleria huberi*, *S. longigluma*, *S. macrogyne*, *S. martii*, *S. setuloso-ciliata*, *S. splitgerberiana*, *S. stipularis* and *S. tepuiensis*.

Key words. Colombia, Cyperaceae, floristics, *Scleria*.

RESUMEN
Se presenta una lista anotada y actualizada del género *Scleria* (Cyperaceae) para Colombia. Se incluye una clave de identificación de las 32 especies reconocidas en este tratamiento. Las especies siguientes se registran por primera vez para Colombia: *Scleria huberi, S. longigluma, S. macrogyne, S. martii, S. setuloso-ciliata, S. splitgerberiana, S. stipularis* y *S. tepuiensis*.

Palabras clave. Colombia, Cyperaceae, florística, *Scleria*.

INTRODUCTION

Colombia is one of the South American countries where floristical studies are still most needed to fill the largest lack of this kind of knowledge in the region. A Flora or Checklist is not available and several large biogeographic regions (e.g. Chocó, Amazonia) are undercollected (Prance 2001: 353). Recent inventory projects have just started (e.g. 'Botanical Inventory of the Río Escalerete Reserve' and 'Guide to the Plants of the Bajo Calima Region'; for more details on these projects see http://www.mobot.org/MOBOT/research/samerica.html) and preliminary checklists do not include Cyperaceae. Two published floristic accounts (Mora-Osejo 1966 and Forero & Gentry 1989) cover restricted political areas in Colombia and mention together only 7 *Scleria* species. The only publications dealing with the *Scleria*'s of Colombia are that by Core (1948) and Pfeiffer (1953) but these were published circa 50 years ago with an update by Pfeiffer in 1955 (thanks to the notice by Hermann 1948). Core (1948) mentions 25 taxa and Pfeiffer (1953) mentions only 21 taxa. The only available revision of the American species of *Scleria* is even older (Core 1936). The dated and fragmentary data make an updated checklist indispensable.

Although only a small number of specimens were studied (80+ excl. duplicates), there are several new records (*S. huberi* C.B. Clarke, *S. longigluma* Kük., *S. macrogyne* C.B. Clarke, *S. martii* (Nees) Steud., *S. setuloso-ciliata* Boeck., *S. splitgerberiana* Henrard ex Uittien, *S. stipularis* Nees and *S. tepuiensis* Core) and systematic and nomenclatural changes were numerous since the last available checklist of Pfeiffer (1953). Of all 9 names described from Colombia only one type, that of *Scleria killipiana* Britton ex Core, was not seen.

Accepted species names are **bold** printed, synonyms are *italicised*. Each species entry is followed by literature reference(s) except for those taxa newly reported for Colombia. Then follow habitat and altitude data (if available) compiled from the herbarium labels, the departments where the species was found (see table 1 for the list of acronyms), vernacular name when available, a note if necessary, and a list of examined specimens or a voucher citation if no specimens were seen.

Key to the Colombian species of *Scleria*

1. Plant dioecious .....*S. tenacissima*
1'. Plant monoecious 2
2. Spikelets unisexual, staminate spikelets restricted to the upper part of the inflorescence, pistillate spikelets borne in the lower portion .....*S. bracteata*
2'. Spikelets bisexual or unisexual, if unisexual then staminate and pistillate spikelets not borne in separate unisexual partial inflorescences 3
3. Hypogynium obsolete; bisexual spikelets present; staminate flower with 1-2 stamens; leaves mostly < 3 mm wide (sect. *Hypoporum* s.l.) 4
3'. Hypogynium well developed; bisexual spikelets absent or rare; staminate flower with 3 stamens, rarely 2 or 1; leaves mostly > 3 mm wide 7
4. Perennial rhizomatous herb; spikelet clusters conspicuously reflexed in fruit; inflorescence a spike of spikelet clusters .....*S. distans*
4'. Annual or perennial caespitose herb; spikelet clusters not reflexed in fruit; inflorescence more or less branched 5
5. Nutlet smooth .....*S. purdiei*
5'. Nutlet reticulate to rugose 6
6. Nutlet faintly reticulate; inflorescence much branched .....*S. killipiana*
6'. Nutlet deeply reticulate to rugose; inflorescence only slightly branched .....*S. verticillata*
7(3). Spikelets strictly unisexual; inflorescence very densely paniculate (main inflorescence axis barely visible), pyramidal, pistillate spikelets lowermost in each side branch, staminate spikelets mostly on distinct long peduncles (sect. *Hymenolytrum*) 8
7'. Always subandrogynous spikelets present; inflorescence mostly rather lax, without this combination of characters ...13
8. Contraligule unappendaged 9
8'. Contraligule with a large scarious appendage 11
9. Inflorescence purplish brown to brown; upper primary bracts filiform or slightly foliate, conspicuously exceeding the inflorescence; nutlet rugose and slightly stipitate .....*S. tepuiensis*
9'. Inflorescence straw coloured; upper primary bracts not exceeding the inflorescence; nutlet rugulose to almost smooth 10
10. Leaves 7-15(-19) mm wide; foliate bracts 6-13 mm wide .....*S. cyperina*
10'. Leaves 18-45 mm wide; foliate bracts (10-)15-30(-35) mm wide .....*S. robusta*
11(8). Third glume of staminate spikelets conspicuously awned giving the inflorescence a prickly appearance, awns 2-3 mm long; leaves 25-40 mm wide; lowest foliate bracts 10-70 cm long, 20-40 mm wide .....*S. stipularis*

11'. Glumes of staminate spikelets not conspicuously awned; leaves 5-25 mm wide; lowest foliate bracts 4-30 cm long, 2-25 mm wide 12
12. Hypogynium lobes deeply dissected; inflorescence purplish .....*S. martii*
12'. Hypogynium lobes entire; inflorescence straw-coloured to dark brownish purple .....*S. macrogyne*
13(7). Margin of lobes of hypogynium laciniate (sect. *Schizolepis*) 14
13'. Margin of lobes of hypogynium not laciniate 15
14. Leaves > 3 cm wide; inflorescence purplish; nutlet 2.7-3.5 x 2.7-3.4 mm .....*S. latifolia*
14'. Leaves < 3 cm wide; inflorescence yellow-brown; nutlet 1.8-2.1 x 1.4-1.6 mm .....*S. neogranatensis*
15(13). Cupula more or less cup-shaped, corky, margin ciliate to ciliolate, completely covering the hypogynium; nutlet generally with persistent style base (sect. *Ophryoscleria*) 16
15'. Cupula not as above; style base deciduous (sect. *Scleria* s.l.) 20
16. Margin of cupula very densely ciliate, cilia purplish to black (sometimes brownish) and very conspicuous (to 0.9 mm long); style base persistent, dark purplish to blackish, the base with minute downwardly pointing prickles .....*S. mitis*
16'. Margin of cupula densely to sparsely ciliate, cilia hyaline to yellowish or light brown (0.1-0.5 mm long); style base deciduous or persistent, if persistent then light to dark brown, the base without prickles 17
17. Nutlet 1.9-2.5 x 1.2-1.5 mm, conspicuously flattened in upper view .....*S. microcarpa*
17'. Nutlet 3.5-6.0 x 2.6-4.8 mm, circular to ovoid in upper view 18
18. Leaves 13-27 mm wide; nutlet 2.6-2.9 mm wide .....*S. eggersiana*
18'. Leaves (25-)45-70 mm wide; nutlet 3.1-4.8 mm wide 19
19. Branches of terminal and lateral inflorescences more or less erect; style base persistent; culm max. 3.0-6.2 mm wide; bracteate bracts 11.2-37.6 mm long; nutlet (3.8-) 5.0-6.0 x 3.5-4.8 mm; margin of cupula sparsely ciliate .....*S. macrophylla*
19'. Branches of terminal and lateral inflorescences patent; style base deciduous; culm max. 7.6-8.5 mm wide; bracteate bracts 21.-8.2 mm long; nutlet 4.0-4.4 x 3.1-3.5 mm; margin of cupula densely ciliate .....*S. sprucei*
20(15). Ligule present as a conspicuous fringe or patch of short hairs 21
20'. Ligule absent 23
21. Nutlet purplish or purplish variegated with white .....*S. vaginata*
21'. Nutlet white to pale beige 22
22. Climbing herb; ligule a compact fringe of white to beige trichomes; nutlet mostly glabrous; leaf sheaths not winged .....*S. secans*
22'. Erect herb; ligule a patch of trichomes spreading out on the adaxial side of the leaf; nutlet with small lines of short trichomes; leaf sheaths narrowly winged .....*S. scabra*
23(20). Nutlet reticulate .....*S. reticularis*
23'. Nutlet smooth to tuberculate, never reticulate 24
24. Margin of lobes of hypogynium crenulate .....*S. setuloso-ciliata*
24'. Margin of lobes of hypogynium not crenulate 25
25. Nutlet completely white to pale beige or greyish 26
25'. Nutlet purple or brownish variegated with white or not 30
26. Nutlet verrucose .....*S. parallela*
26'. Nutlet essentially smooth 27
27. Pistillate glume 9-11 mm long .....*S. longigluma*
27'. Pistillate glume < 5 mm long 28
28. Nutlet 4.5-5.5 x 3.5-4 mm .....*S. mexicana*
28'. Nutlet (2.0-)2.3-3.2(-3.4) x 1.7-2.5 mm 29

29. Leaf sheaths winged, wings 1-2 mm wide; cupula deep, 3-lobed .....*S. melaleuca*
29'. Leaf sheaths not winged; cupula shallow, dish-like .....*S. lagoensis*
30(25). Herbs with high-climbing culms up to 5 m tall, branching from the upper nodes 31
30'. Herbs with erect, not climbing, not branching culms up to 1.5 m tall 32
31. Nut with a triangular outline .....*S. macbrideana*
31'. Nut circular to ovate .....*S. splitgerberiana*
32(30). Staminate flower with 1 stamen; nutlet (2.0-)2.3-3.2(-3.4) x 2.0-2.5 mm, smooth and glabrous but with some hair bearing tubercles near the hypogynium .....*S. melaleuca*
32'. Staminate flower with 2 stamens; nutlet ca. 3.6 x 2.8 mm, verrucose-trabeculate with hyaline hairs .....*S. huberi*

List of species

Scleria arundinacea Kunth = **Scleria latifolia** Sw.
Ref. Core 1948: 25.

Scleria bracteata Cav.
Ref. Core 1948: 26; Pfeiffer 1953: 119; Mora-Osejo 1966: 119.
Vining herb along roadsides and margins of (secondary) forest. 1000-1450 m
Depts.: AN, CAU, CU, MA, ME, TO, VC
Specimens examined: COLOMBIA. MAGDALENA: Santa Marta, *H.H. Smith* 2179 (BM!, BR!, MA!, P-3!).

Scleria chimborazensis C.B. Clarke = **Scleria mexicana** (Liebm.) Boeck.
Ref. Core 1948: 30; Pfeiffer 1953: 117.

Scleria cyperina Willd. ex Kunth
Ref. Core 1948: 25; Pfeiffer 1953: 118; Mora-Osejo 1966: 119.
Dry places, savannas, rocky outcrops. ca. 100 m
Depts.: CU, ME, SA, VI
Specimens examined: COLOMBIA. META: Serranía de La Macarena, margen izquierda del Río Guayabero, a 10 km abajo de Caño Lozada, sabana, *P. Pinto & al.* 189 (P!). VICHADA: 100 m, Laja outcrops, *A. Gentry & B. Stein* 46332 (MO!).

Scleria distans Poir.
Syn. *Scleria hirtella* auct. mult., non Sw.
Ref. Core 1948: 19; Pfeiffer 1953: 116.
Wet (sometimes partially flooded) pastures and savannas. 400-1000 m
Depts.: AN, CAU, CU, MA, ME, NS, TO, VC
Vern.: 'Curibano'
We have not seen specimens of the much rarer *S. hirtella* Sw.
Specimens examined: COLOMBIA. BOGOTÁ: Suzumuro, 1000 m, *J.J. Triana* 399 (BM!, P!). Plano de San Martín, 400 m, *J.J. Triana* 400 (BM!, P!). MAGDALENA: Santa Marta, ca. 750 m, *H.H. Smith* 235 (BR!, P!). META: La Macarena, 5 km O de La Macarena, vía a "Conejos", sabana dominada por gramíneas y cyperáceas en suelos anegados parcialmente, *R. Callejas* 7055 (GENT!). Municipio de San Juan de Arama, margen izquierda del caño Cunimáa. Hatos El Vaticano, San Miguel y Mirolindo, ca. 250 m, en sabana abierta, en lugares más húmedos, *P.E. Pinto* 1696 (P!). NO DATA: *Funck* 696 (P!). *Hartweg* 858 (BM!). 500 m, *E.P. Killip* 34329 (BM!).

Scleria eggersiana Boeck.
Ref. Core 1948: 24.
Wet, open places.
Depts.: AN
No specimens seen.
Voucher: COLOMBIA. *Triana* 383 (US)

Scleria grandis Core, non Labill. = **Scleria robusta** Camelb. & Goetgh.
Ref. Core 1948: 25.

Scleria hirtella auct. mult., non Sw. = **Scleria distans** Poir.
Ref. Core 1948: 19; Pfeiffer 1953: 116.

Scleria hirtella var. *killipiana* (Britton ex Core) H. Pfeiff. = **Scleria killipiana** Britton ex Core
Ref. Pfeiffer 1953: 116.

Scleria huberi C.B. Clarke
Forests. ca. 1300 m
Depts.: NA
Citation to be confirmed. Only one specimen seen and no ripe fruits were present. *S. huberi* is known from Peru, Bolivia, and Brazil.
Specimens examined: COLOMBIA. NARIÑO: Ricaurte, 1300 m, forest, *K. von Sneidern* A631 (K!).

Scleria killipiana Britton ex Core
Syn. *Scleria hirtella* var. *killipiana* (Britton ex Core) H. Pfeiff.
Ref. Core 1948: 22; Pfeiffer 1953: 116.
Dry, open hills.
Depts.: VC
Endemic
This species may well belong to the very variable *Scleria verticillata* (see also discussion by Core 1934: 240). We have only seen a scanned image of the type specimen of *S. killipiana* and must thus refrain ourselves from placing it in synonymy of *S. verticillata*. We can see no reason for recognizing this species as variety of *S. hirtella* as Pfeiffer (1953: 116) did.
Specimens examined: COLOMBIA. VALLE DEL CAUCA: Pavas, 1500-1700 m, *E.P. Killip* 11667 (NY, scanned image seen).

Scleria lagoensis Boeck.
Ref. Core 1948: 28; Pfeiffer 1953: 118.
Wet pastures and margins of forests.
Depts.: MA
Specimens examined: COLOMBIA. MAGDALENA: Santa Marta, *H.H. Smith* 237 (BM!, K!, P-2!).

Scleria latifolia Sw.
Syn. *Scleria arundinacea* Kunth
Ref. Core 1948: 25.
In forests and clearings. 1630 m
Depts.: AN, NS
No specimens seen.
Voucher: COLOMBIA. NORTE DE SANTANDER: Región del Sarare, Hoya del Río Cubugón, entre El Caraño y El Indio, *J. Cuatrecasas* 13026 (COL).

Scleria longigluma Kük.
Swampy areas in savannas. ca. 410 m
Depts.: ME
Specimens examined: COLOMBIA. META: La Macarena, 5 km O de La Macarena, vía a "Conejos", 410 m, sabana dominada por gramíneas y cyperáceas en suelos anegados parcialmente, *R. Callejas* 7048 (GENT!).

Scleria macbrideana Gross
Ref. Core 1948: 29.
Moist forests. 1600 m
No specimens seen.
Depts.: AN
Voucher: COLOMBIA. ANTIOQUIA: between Argelia and Alto del Tigre, 1600 m, *E.L. Core* 808 (WVA).

Scleria macrogyne C.B. Clarke
Moist places in forests. ca. 350 m
Depts. : AM, VA
Specimens examined: COLOMBIA. AMAZONAS: Río Igará-Paraná (afl. Río Putumayo), La Chorrera, *C. Sastre* 3514 (P!).
Specimens examined (without ripe fruits): COLOMBIA. AMAZONAS: *J. Gasche & J. Desplats* 1109 (P!). Río Cubiyu, affluent du Río Vaupés, Comisaría del Vaupés, c. 350 m, *H. Humbert & R.E. Schultes* 27375 (P!). *R.E. Schultes & I. Cabrera* 12768 (BM!). Río Apaporis, Raudal Yayacopi (La Playa), *R.E. Schultes & I. Cabrera* 16895 (BM!).

Scleria macrophylla J. & C. Presl
Ref. Core 1948: 22; Forero & Gentry 1989: 47.
Understory of humid forests. 20-1200 m
Depts.: AN, CH, VC
Specimens examined: COLOMBIA. ANTIOQUIA: en las Fuentes Termales de Santo Domingo, ca 1200 m, selvas húmedas, *R. Scolnik* 19An466 (C!, immature specimen). CHOCÓ: Bahía Solano Municipio, Corregimiento El Valle, carretera entre el puente sobre la quebrada Tund y el km 7 del Valle-Bahía Solano, *J. Espina & al.* 2978 (GENT!). VALLE DEL CAUCA: Buenaventura, San Fancisco, Vereda Calle Larga, Río Naya, 20 m, *W.A. Devia & al.* 2879 (GENT!).

Scleria martii (Nees) Steud.
Scrubby forests. 200-1200 m
Depts.: AM, ME
Specimens examined: COLOMBIA. AMAZONAS: Río Caquetá, Tres Esquinas, 200 m, *M. Køie* 5034 (C!). META: Sierra de La Macarena, 1200 m, scrubby forest on summit of ridge, *W.R. Philipson & J.M. Idrobo* 1893 (BM!).

Scleria melaleuca Rchb. ex Schltdl. & Cham.
Syn. *Scleria pterota* Presl, *Scleria pterota* var. *melaleuca* (Rchb. ex Schltdl. & Cham.) Uittien
Ref. Core 1948: 29; Pfeiffer 1953: 117; Mora-Osejo 1966: 119. Forero & Gentry 1989: 47.
Roadsides, margins of secondary forest, riverbanks and grassy plains. 200-1000 m
Depts.: AM, AN, BOY, CAL, CAQ, CAU, CH, CU, MA, ME, NA, VC
S. melaleuca has also been reported from San Andrés, Providencia y Santa Catalina, the islands ca. 225 km east of Nicaragua in the Caribbean Sea. Although they are a political part of Colombia, we did not study specimens of these islands because they are outside our study area.
Specimens examined: COLOMBIA. AMAZONAS: Río Caquetá, Tres Esquinas, 200 m, *M. Køie* 5029 (C!). CALDAS: Sta. Cecilia, 800 m, *K. von Sneidern* 5241 (C!). MAGDALENA: Santa Marta, *H.H. Smith* 2195 (BM!). META: Los Llanos, Río Meta, Cabuyaro, 235 m, *J. Cuatrecasas* 3629 (P!). NO DATA: *E.P. Killip & Hernando Garcia* 33137 (BM!). *E.P. Killip* 35204 (BM!). *J.J. Triana* 397 (BM!). *J.J. Triana* 398 (BM!).

Scleria melicoides auct., non Schltdl. = **Scleria purdiei** C.B. Clarke
Ref. Pfeiffer 1953: 116.
The identity of this name remains uncertain. Pfeiffer (1953) erroneously places the annual *S. purdiei* in synonymy of the perennial *S. melicoides*. The citation of this species for Colombia should be considered doubtful.

Scleria mexicana (Liebm.) Boeck.
Syn. *Scleria chimborazensis* C.B. Clarke
Ref. Core 1948: 30; Pfeiffer 1953: 117.
Margins and undergrowth of forests. ca. 1420 m
Depts.: CAU, MA, VC
Specimens examined: COLOMBIA. MAGDALENA: Santa Marta, *H.H. Smith* 2196 (K!). *H.H. Smith* 2521 (BM!, BR!, K!, P-2!).

Scleria microcarpa Nees ex Kunth
Ref. Core 1948: 23; Pfeiffer 1953: 119; Forero & Gentry 1989: 47.
Swamps, wet forests and roadsides, sometimes forming dense thickets. 30-400 m
Depts.: AN, BOL, BOY, CAQ, CH, MA, ME, SA, VC
Vern.: 'Pajón'
Specimens examined: COLOMBIA. MAGDALENA: Santa Marta, ca 30 m, *H.H. Smith* 236 (BM!, P!). META: La Macarena, Vereda "Yarumales arriba", finca bordeando la ciénaga del Río Guayabero, 1 hora por bote al S de La Macarena, 310 m, *R. Callejas & O. Marulanda* 7115 (GENT!). NO DATA: *R.E. Schultes & I. Cabrera* 16129 (BM-2!).

Scleria microcarpa var. **latifolia** Balb. ex Boeck.
Ref. Core 1948: 23; Hermann 1948: 35; Pfeiffer 1955: 217.
Swamps, wet forests, riversides, low thickets. 90-250 m
Depts.: SA

We have not seen the type of this variety described from Guadeloupe and therefore we have no information on the status of this taxon.
No specimens seen.
Voucher: COLOMBIA. SANTANDER: Puerto Wilches, *Hermann 10887* (US).

Scleria micrococca (Liebm.) Steud. = **Scleria verticillata** Muhl. ex Willd.
Ref. Core 1948: 21; Pfeiffer 1953: 116.

Scleria mitis P.J. Bergius
Syn. *Scleria vichadensis* F.J. Herm.
Ref. Core 1948: 23; Hermann 1948: 38; Pfeiffer 1953: 119; Pfeiffer 1955: 217; Forero & Gentry 1989: 47.
Margins of rivers and swamps, clearings. ca. 250 m
Depts.: CH, ME, VC, VI
Specimens examined: COLOMBIA. BOGOTÁ: Bois du Meta, 250 m, *J.J. Triana* s.n. (P!). NO DATA: *P.E. Pinto & C. Sastre 1305* (P!). *J.J. Triana* 386 (BM!, K-2!, US).

Scleria muhlenbergii Steud. = **Scleria reticularis** Michx.
Ref. Core 1948: 27.

Scleria neogranatensis C.B. Clarke
Ref. Core 1948: 25; Pfeiffer 1953: 119.
Swamps and moist places in (secondary) forests. ca. 1000 m
Depts.: AN, CAU, MA, VC
Specimens examined: COLOMBIA. ANTIOQUIA: San Rafael, 8.1 km E of San Rafael on San Rafael-San Carlos road, 1000 m, margin of secondary forest and roadside drainage area, *A.E. Brant & J.F. Roldán* 1492 (GENT!). MAGDALENA: Santa Marta, *H.H. Smith* 2199 (BM!, P-2!). VALLE DEL CAUCA: La Paila, *I.F. Holton* 108 (K!). 1000 m, *J.J. Triana* 435 (BM!, P!). NO DATA: *J. Gasche & J. Desplats* 79 (P!). *J. Gasche & J. Desplats* 1042 (P!). *C. Sastre* 2421 (P!).

Scleria parallela C.B. Clarke
Ref. Core 1948: 27.
Forests.
Depts.: VA
No specimens seen.
Voucher: COLOMBIA. VAUPÉS: Cerro de Mitú, *J. Cuatrecasas* 6884 (COL).

Scleria pterota Presl = **Scleria melaleuca** Rchb. ex Schltdl. & Cham.
Ref. Core 1948: 29; Pfeiffer 1953: 117; Forero & Gentry 1989: 47.

Scleria pterota var. *melaleuca* (Rchb. ex Schltdl. & Cham.) Uittien = **Scleria melaleuca** Rchb. ex Schltdl. & Cham.
Ref. Pfeiffer 1953: 117.

Scleria purdiei C.B. Clarke
Syn. *Scleria melicoides* auct., non Schltdl.
Ref. Core 1948: 21; Pfeiffer 1953: 116.
(Mountain) woods and savannas.
Depts.: MA
Specimens examined: COLOMBIA. MAGDALENA: Santa Marta, high mountain woods, *Purdie* s.n. (K!). Santa Marta, *H.H. Smith 2198* (K!). NO DATA: *Moritz* 1911 (BM!).

Scleria reflexa Kunth = **Scleria secans** (L.) Urb.
Ref. Pfeiffer 1953: 117.

Scleria reticularis Michx.
Syn. *Scleria muhlenbergii* Steud., *Scleria setacea* auct. mult., non Poir.
Ref. Core 1948: 27; Pfeiffer 1953: 118.
Pastures.
Depts. : CAU, HU, TO
No specimens seen.
Voucher: COLOMBIA. CAUCA: along Río Palo at El Palo, *E.L. Core* 174 (WVA).

Scleria robusta Camelb. & Goetgh.
Syn. *Scleria grandis* Core, non Labill.
Ref. Core 1948: 25.
Forests of the upper Amazon Valley. 200-900 m
Depts.: CAQ, VA
Specimens examined: COLOMBIA. CAQUETÁ: Florencia, cerro de La Sardina, ca 500 m, bos-

que, *J. Cuatrecasas* 8890 (US!). VAUPÉS: cerca de Mitú, selva del Tuí-Igarapé, 200 m, *J. Cuatrecasas* 6870 (US-2!). NO DATA: 900 m, *W.R. Philipson* 2374 (BM!).

Scleria scabra Willd.
Ref. Core 1948: 32; Hermann 1948: 35; Pfeiffer 1955: 217.
Open, semi-barren plains and forests. 100 m
Depts.: VI
No specimens seen.
Voucher: COLOMBIA. VICHADA: bordering Río Vichada, about 18 km NE of San José de Ocuné, *F.J. Hermann* 11050 (COL, US).

Scleria secans (L.) Urb.
Syn. *Scleria reflexa* Kunth, *Scleria stenophylla* Core
Ref. Core 1948: 31; Pfeiffer 1953: 117; Forero & Gentry 1989: 47.
Vine forming tangles in undergrowth, borders of (secondary) forests, riversides and savannas. 150-1300 m
Depts.: AN, BOY, CH, CU, MA, ME, NS, SA, VC
Specimens examined: COLOMBIA. CUNDINAMARCA: Buenavista to Pipiral, SE of Quetame, 1000-1200 m, roadside in forest, *F.W. Pennell* 1682 (K!). SANTANDER: Río Magdalena near Carare, *E.F. André* 275 (K!). VALLE DEL CAUCA: Buenaventura, San Isidro, ca. 230 m, *J. van Rooden & al.* 319 (K!). NO DATA: *J. Gasche & J. Desplats* 144 (P!). *J. Gasche & J. Desplats* 1209 (P!). *Lehmann* 5743 (P!). *W.R. Philipson & al.* 1682 (BM!). *C. Sastre* 3204 (P!). *J.J. Triana* 385 (BM!). *J.J. Triana* s.n. (P!).

Scleria setacea auct. mult., non Poir. = **Scleria reticularis** Michx.
Ref. Pfeiffer 1953: 118.

Scleria setuloso-ciliata Boeck.
Open moist places along stream. ca. 50 m
Depts.: AN
Specimens examined: COLOMBIA. ANTIOQUIA: Caucasia, road to Nechí, 1.55 km from Caucasia-Planeta Rica Road, 50 m, *A.E. Brant & O. Escobar* 1262 (GENT!).

Scleria splitgerberiana Henrard ex Uittien
Climbing sedge in woods.
Depts.: VA
Specimens examined: COLOMBIA. VAUPÉS: Río Piraparaná (tributary of Río Apaporis), Caño Teemeeña, *R.E. Schultes & I. Cabrera* 17444 (US-2!).

Scleria sprucei C.B. Clarke
Ref. Hermann 1948: 36; Pfeiffer 1955: 217.
Margin of gallery forests. 100-250 m
Depts.: ME, VI
Specimens examined: COLOMBIA. META: Puerto Gaitán, al oeste de la población, 250 m, al margen de selva de galería, *P.E. Pinto & C. Sastre* 1132 (P!). VICHADA: monte 3 km SE of Masaguaro along Río Vichada, ca. 27 km NE of San José de Ocuné, 100 m, *F.J. Hermann* 11007 (K!, photo).

Scleria stenophylla Core = **Scleria secans** (L.) Urb.
Ref. Core 1948: 31; Pfeiffer 1953: 117.
Examination of an isotype of *S. stenophylla* (*Pennell* 1682, K!) made us place this name in synonymy of *S. secans*. The diagnostic characters mentioned by Core (1934: 242) for distinguishing *S. stenophylla* from *S. secans*, namely outline and colour of the glumes, are insufficient for recognition as a distinct species.

Scleria stipularis Nees
Forests. ca. 200 m
Depts.: VA
Specimens examined: COLOMBIA. VAUPÉS: San Felipe, Río Negro, ca. 200 m, *H. Humbert* 27450 (P!). San Felipe, Río Negro, ca. 200 m, *H. Humbert* 27497 (P!).

Scleria tenacissima (Nees) Steud.
Ref. Core 1948: 28; Hermann 1948: 35; Pfeiffer 1955: 217.
Vine up to 14 m long clambering in thickets on flood plain. 200 m

Depts.: BOY, ME
Specimens examined: COLOMBIA. NO DATA: *O. Haught* 2636 (BM!, US).

Scleria tepuiensis Core
Wet places to dry savannas. ca. 410 m
Depts.: ME
Specimens examined: COLOMBIA. META: El Refugio, Parque Nacional Sierra de La Macarena, 10 km del Refugio, 410 m, *R. Callejas & A. Arias* 6476 (GENT!).

Scleria vaginata Steud.
Ref. Core 1948: 28.
Moist forests.
Depts.: VC
Specimens examined: COLOMBIA. VALLE DEL CAUCA: *E.P. Killip & J. Cuatrecasas* 38972 (BM!).

Scleria verticillata Muhl. ex Willd.
Syn. *Scleria micrococca* (Liebm.) Steud.
Ref. Core 1948: 21; Pfeiffer 1953: 116.
Swampy plains. 600 m
Depts.: CU, MA, ME, NS, SA, TO
Specimens examined: COLOMBIA. MAGDALENA: Santa Marta, ca 600 m, *H.H. Smith* 234 (BM!, BR!, P-2!). META: Llanos Orientales Altillanuras, Altillanura disectada, estero de un morichal, *J. Blydenstein* 976 (P!). NO DATA: *O. Haught* 2354 or 2254 (BM!). *Moritz* 641 (C!). *Moritz* 697 (C!). *Purdie* s.n. (P!).

Scleria vichadensis F.J. Herm. = **Scleria mitis** P.J. Bergius
Ref. Hermann 1948: 38; Pfeiffer 1955: 217.
A careful study of the original description and a paratype specimen (*Triana* 386, BM!, K-2!, US) of *S. vichadensis* made us place this name in synonymy of *S. mitis*. From the discussion accompanying the original description (Hermann 1948: 39) it is clear that he was not acquainted with the variability of that last species.

Table 1. Acronyms of Colombian political divisions (Departments)

Amazonas = AM	Cauca = CAU	Norte de Santander = NS
Antioquia = AN	Chocó = CH	Putumayo = PU
Arauca = AR	Córdoba = CO	[San Andrés, Providencia y Santa Catalina]
Atlántico = AT	Cundinamarca = CU	Santander = SA
Bolívar = BOL	La Guajira = GU	Tolima = TO
Boyacá = BOY	Huila = HU	Valle del Cauca = VC
Caldas = CAL	Magdalena = MA	Vaupés = VA
Caquetá = CAQ	Meta = ME	Vichada = VI
Casanare = CAS	Nariño = NA	

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LITERATURE CITED

CORE, E.L. 1934. Studies in the genus *Scleria*. Brittonia 1: 239-243.

CORE, E.L. 1936. The American species of *Scleria*. Brittonia 2: 1-105.

CORE, E.L. 1948. The genus *Scleria* in Colombia. Caldasia 5(21): 17-32.

FORERO, E. & GENTRY, A.H. 1989. Lista anotada de las plantas del Departamento del Chocó, Colombia. Biblioteca José Jerónimo Triana 10: 1-142.

HERMANN, F.J. 1948. Additions to the Flora of Colombia. Caldasia 5(21): 33-39.

MORA-OSEJO, L.E. 1966. Catálogo ilustrado de las plantas de Cundinamarca. 1. Cyperaceae. pp. 93-128.

PFEIFFER, H.H. 1953. Über die Cyperaceengattung *Scleria* in Columbien. Feddes Repertorium Specierum Novarum Regni Vegetabilis 55: 113-119.

PFEIFFER, H.H. 1955. Nochmals zu den Columbianische *Scleria*-Arten. Feddes Repertorium Specierum Novarum Regni Vegetabilis 57: 216-217.

PRANCE, G.T. 2001. Discovering the plant world. Taxon 50: 345-359.

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